Claim Amendments

Applicants have amended claims 1 and 55, and added claims 57-58. Applicants set forth below a complete listing of the claims with the corresponding status indicated for each claim.

1. (Currently Amended) A method for providing a design test bench ~~using a single executable program~~, the method comprising:

partitioning functionality of the test bench between a simulation engine and one or more scripted routines within a single executable program, wherein each scripted routine implements a corresponding function;

instantiating one or more interpreters in the simulation engine, wherein each interpreter is associated with a corresponding scripted routine and may interact with the simulation engine independently of any other interpreter;

causing the simulation engine to pass control to the corresponding interpreter upon encountering one of the functions; and

causing the corresponding interpreter to return control to the simulation engine upon encountering a task that is performed by the simulation engine.

2-4. (Cancelled).

5. (Previously Presented) The method of Claim 1, further comprising synchronizing the simulation engine and the corresponding interpreter via a semaphore.

6-54. (Cancelled).

55. (Currently Amended) A method for providing a design test bench, the method comprising:

using multiple threads to partition functionality of the test bench between a simulation engine and one or more scripted routines while maintaining a single-threaded nature of simulation, wherein each scripted routine implements a corresponding function;

instantiating one or more interpreters in the simulation engine, wherein each interpreter is associated with a corresponding scripted routine and may interact with the simulation engine independently of any other interpreter;

causing the simulation engine to pass control to the corresponding interpreter upon encountering one of the functions; and

causing the corresponding interpreter to return control to the simulation engine upon encountering a task that is performed by the simulation engine.

56. (Previously Presented) The method of Claim 55, further comprising synchronizing the simulation engine and the corresponding interpreter via a semaphore.

57. (New) The method of Claim 1, further comprising directly sharing variables between the simulation engine and the one or more scripted routines.

58. (New) The method of Claim 55, further comprising directly sharing variables between the simulation engine and the one or more scripted routines.